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ABSTRACT

The basic noun phrase of Koine Greek is examined, and an analysis consistent with current views on phrase structure within X-bar theory is proposed. The fact that the syntactic distribution of quantifiers, demonstratives, and descriptive adjectives is different leads to the proposal that these are distinct word classes in Greek, as in many other languages. The distribution of articles is given serious attention and is found to support the relatively recent proposal (the Determiner Phrase hypothesis) that the traditional noun phrase is best analyzed as a determiner phrase (DP), which may then take a noun phrase (NP) as its complement. Contains 18 references. (Author/MSE)

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On Generating the Greek Noun Phrase

Cheryl A. Black and Stephen A. Marlett

This article examines the basic noun phrase of Koiné Greek and proposes an analysis which is consistent with current views on phrase structure within X-bar theory. The fact that the syntactic distribution of quantifiers, demonstratives and descriptive adjectives is different leads to the (not surprising) proposal that these are distinct word classes in Greek, as in many other languages. The distribution of articles is given serious attention and is found to support the relatively recent proposal (the DP hypothesis) that the traditional noun phrase is best analyzed as a determiner phrase which may then take an NP as its complement.

"It is a curious thing how traditionalism in linguistic teaching has held in slavery so many men who teach Greek today precisely as it was done a hundred years ago." [From the introduction by A. T. Robertson to Davis 1923]

1. Introduction

The tables of contents of most Classical or Koiné Greek grammars reveal an interesting similarity. One quickly sees how much attention is paid to morphological issues and how little is paid to syntax. The reasons for this state of affairs are somewhat understandable given the tradition in which the study of Greek grammar developed and the fact that syntax is a relatively new domain of study as such in linguistics. However, despite the interest in syntax within the past forty years in American linguistics and significant advances in our understanding of it, so far as we know, little progress has been made in the study or teaching of Classical or Koiné Greek syntax.[1]

This is not to say that syntax has received no consideration in descriptions or presentations of Greek in the past. But consider the description of the Noun Phrase, for example. Whereas some emphasis is given to the description of particular parts (such as when the article is used and how certain differences in word order are to be understood), there is never a simple overview of the facts. The present study is intended as a first step to remedy the situation. As such, we do not examine all aspects of Noun Phrases in Greek. We do not take up relative clauses, conjoined phrases, appositives, or disjunctive phrases, although these are also very interesting and are worthy of careful study. But it also becomes clear that when the facts are laid out, and when clear and explicit analyses are proposed and defended, many other areas of research beg to be re-opened.

The presentation we give departs from traditional treatments in a number of ways. First, we propose that the traditional class of Adjective in Greek is in actuality best divided into three

[1] We thank Andy Black, Jim Meyer, Micheal Palmer, Jim Watters and Lindsay Whaley for their helpful comments on this paper. The analysis presented here had its beginning in two seminars on Greek syntax given as part of the Summer Institute of Linguistics program at the University of North Dakota several years ago.

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classes: Quantifier, Demonstrative, and Adjective.[2] As we show, these words have different syntactic properties, and the Noun Phrase in Greek receives adequate description only when the three are clearly distinguished. The distinction is alluded to in many earlier treatments, of course, but the morphological similarity of these classes has overshadowed their syntactic differences.

Second, partly as a result of the recognition of Quantifiers and Demonstratives, we abandon the descriptive terms *predicate position* and *attributive position*. These terms are inadequate, unnecessary, and misleading in the ways they are often used.

Third, we propose a view of the Noun Phrase (actually, the Determiner Phrase, as we show below) which is configurational, in line with current syntactic theories. The phrase is not simply a string of words, one following the other, but it has a hierarchical structure. By separating the configuration or dominance of the elements from their linear order, we are able to provide a much more adequate account of the distribution of elements in the phrase.

The general approach to the structure of the noun phrase taken here is that of X' (X-bar) theory. We introduce the key concepts of this theory as needed. Introductions to the theory may be found in various works on generative grammar, including Sells 1985 and Haegemann 1994 (based on Chomsky 1981 and Chomsky 1986).

In this article we take up four phrase structure functions: heads and complements (in section 2), adjuncts (in section 3), and specifiers (in section 4). Sections 5 through 7 are devoted to other interesting facts about the Greek noun phrase.

2. Heads and Complements

A phrase has a *head* which defines the phrase's identity: Noun Phrases have Nouns as head, Prepositional Phrases have Prepositions as head, Adjectival Phrases have Adjectives as head, and so forth.[3] One of the recent innovations in syntactic theory has been to propose that a phrase such as *the tree* is in actuality a Determiner Phrase, with a Determiner as head (Abney 1987 and Stowell 1989). We adopt a version of this hypothesis for our account of Greek although we do not argue for its superiority over a more traditional analysis.[4] The Determiner of interest here is the Article, which figures prominently in Greek. Despite this innovation, Noun Phrases are still part of the analysis, as we show.

Another constituent of a phrase is the *complement*. As the name suggests, the complement is not a simple modifier of the head (such modifiers are discussed in section 3, where they are called adjuncts), but it is more tightly related to the head. For example, in the VP the direct object of the verb is a complement; the phrase *our sins* is the complement of the verb *forgive* in the phrase *forgive our sins*. We propose that in the phrase την αφεσιν των 'αμαρτιων (Co 1:14) the των 'αμαρτιων is the complement of the noun αφεσιν. We show more examples of noun

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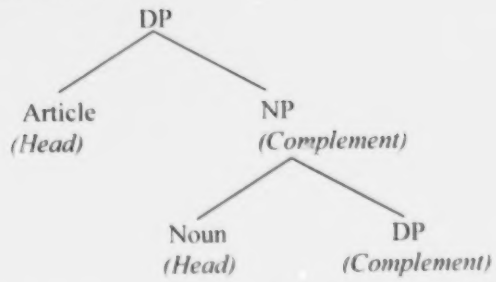
[2] This part of our analysis might have been novel even a few years ago when we were first discussing it in classes, but after preparing the present manuscript we have learned of two publications that present a similar analysis (Palmer 1995 and Whaley 1995). Actually, the fact that traditional grammars spend so much time discussing these classes of words in special sections makes this part of our analysis almost self-evident.

[3] Adjective phrases very often consist of simply the adjective in Greek. Examples with more complex structure include πληρης λεπρας *full of leprosy* Lk 5:12, and πλουσιος σφοδρα *very rich* Lk 18:23.

[4] A major reason for choosing the DP analysis is that it permits a better account of the Quantifiers and Demonstratives, which are analyzed as specifiers in section 4. It also provides an account of the repeated Article phenomenon discussed in section 5. Given the complexity of these facts and the problems they present for earlier forms of syntactic theory, it may be understandable that Greek does not figure in the modern linguistic literature.

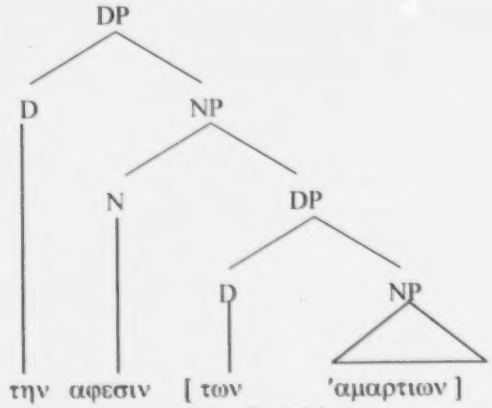
complements below.

(1)



At this point we may diagram the functional notions head and complement as shown in (1). We use the abbreviation DP for Determiner Phrase, and NP for Noun Phrase. The DP has a Determiner (always an Article in the case of Greek) as its head, and it takes an NP as its complement. The NP has a Noun as its head and it takes another DP as its complement. This structure presents two types of information. One is the configurational structure of the DP and NP, of which the head and complement structure is most relevant to us here. The other type of information is linear order; the structure tells us that the head precedes the complement. As far as the Determiner (Article) is concerned, we know that in Greek it always precedes its complement; this is also the usual order with Nouns and their complements. Example (2) illustrates the typical order (head-complement) within the NP, and example (3) illustrates the less frequent order (complement-head) within the NP.[5] (The use of a triangle indicates that the internal structure of the phrase is not being shown for the sake of presentation, since it is irrelevant to the point.) To envision our proposal, think of the highest NP node as the hook on a coat hanger. The coat hanger can rotate, sometimes putting the Noun last, sometimes putting the Noun first.[6]

(2)



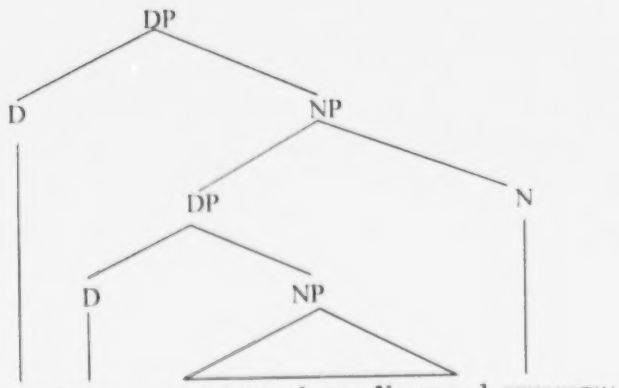
the forgiveness of sins Co 1:14

[5] We know that both head-complement and complement-head order are attested when a verb is the head. The flexibility of word order is discussed more below.

[6] Another example of the pre-head complement position is της ['υμων] οικοδομης *your edification (the edification of you)* 2 Co 12:19.

The structure we are proposing does not follow Kayne's (1994) restricted view of phrase structure where all heads, specifiers and adjuncts must be on the left.

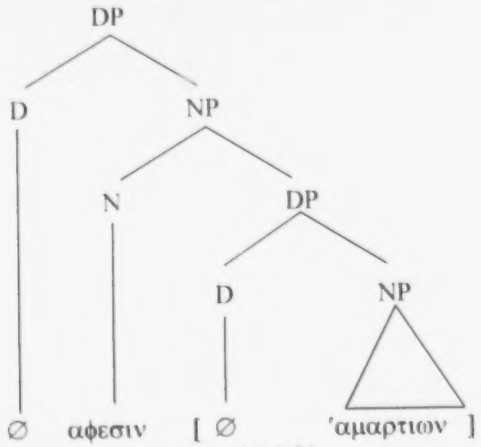
(3)



the knowledge of our Lord Jesus Christ 2 Pe 1:8

Under this account of DPs, the head Determiner (article) is not always overt; we represent the lack of an overt head with a null sign, as shown in (4).[7]

(4)



forgiveness of sins Ac 5:31

Other examples of complements of NPs include the following (all with head-complement order, all with genitive DP complements): την δωρεαν [του 'αγιου πνευματος] *(the gift of the Holy Spirit)* Ac 2:38; της δωρεας [της δικαιοσυνης] *(the gift of righteousness)* Ro 5:17; την δωρεαν [της χαριτος του θεου] *(the gift of the grace of God)* Ep 3:7; μαρτυρα [της αναστασεωσ αυτου] *(a witness of his resurrection)* Ac 1:22; τη αναιρεσει [αυτου] *(the killing of him)* Ac 8:1; της γνωσεως [της δοξης του θεου] *(the knowledge of the glory of God)* 2 Co 4:6; επαγγελιαν [ζωης της εν Χριστω] *(the promise of life in Christ Jesus)* 2 Ti 1:1; τον φοβον [των Ιουδαιων] *(the fear of the Jews)* Jn 7:13; τη κλασει [του αρτου] *(the breaking of bread)* Ac 2:42, among many others.

The complement may also be a finite clause in Greek, comparable to the clause following the noun *news* in the noun phrase *the news that you had won the election*.[8]

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[7] An alternative analysis would be to avoid the use of the null heads and strip these representations of all structure that dominates the null elements. For our purposes here, the differences between these analyses is not important.

[8] See section 7 where we discuss non-finite clauses that occur in DPs.

(5) φασις ... ['οτι συγχυννεται Ιερουσαλημ]
the report ... that all Jerusalem was in confusion Ac 21:31

(6) ελπιδα μου ['οτι εν ουδενι αισχυνθησομαι]
my hope that I will be ashamed about nothing Ph 1:20

The distinction between complements and adjuncts enables us to make an explicit formal difference between a phrase like την δωρεαν [της χαριτος του θεου] *(the gift of the grace of God,* Ep 3:7), which contains a complement (since the grace of God is what is given – the so-called 'objective' genitive), and την δωρεαν [του θεου] *the gift of God* (Ac 8:20), which has a modifier that is not a complement but rather an adjunct (since God is the giver of the gift – the 'subjective' genitive). We discuss such modifiers in the following section.[9]

3. Adjuncts

Nouns are often modified by a variety of phrases; some of these modifiers are called *adjuncts*. Adjuncts are less tightly bound semantically as well as structurally to the head which they modify. In Greek, we find adjunct Adjective Phrases (APs), Verb Phrases (VPs), and Prepositional Phrases (PPs), as well as adjunct DPs. In many instances, only one word actually instantiates the adjunct phrase. For example, the modifier may be a simple adjective, as in *black dogs*. But since there is the potential for fuller expansion, as in *very black dogs*, even simple adjectives are best viewed as minimal Adjective Phrases which happen to have nothing modifying the Adjective.

Simple examples of each type of adjunct are given below using labeled brackets to identify the kind of modifying phrase that it is.

(7) δυναμει [μεγαλη $_{AP}$]
great power Ac 2:2

(8) ανδρα [αποδεδειγμενον απο του θεου .... $_{VP}$]
a man who was accredited by God .... Ac 2:22

(9) τη εκκλησια [εν τη ερημω $_{PP}$]
the church in the desert Ac 7:38

(10) της βασιλειας [του θεου $_{DP}$]
the kingdom of God Ac 1:3

(11) 'ο κριτης [της αδικιας $_{DP}$]
the unjust judge Lk 18:6

The verb of an adjunct VP occurs as a participle, as in (8) and (13) below.[10] In Greek, DPs

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[9] The distinction between complements and adjuncts is one which the theory makes and which we would like to make based on the meaning distinctions mentioned here. However, the distinction is not that clearly made in Greek, as it turns out. Certain predictions which the structural distinction makes are not borne out. See section 4 .

[10] We distinguish between adjunct VPs, which are participles, and infinitival relatives. Infinitival relatives have an infinitive, sometimes preceded by the article του, and the subject (if expressed) in the genitive case. Three examples are given below, but we do not discuss this construction more here.

(i) ευκαιριαν [του παραδουναι αυτον ...]
opportunity to betray him Lk 22:6

(ii) 'ο χρονος [του τεκειν αυτην]
the time for her to give birth Lk 1:57

which are adjuncts of DPs usually occur in the genitive case, as in (10) and (11). Adjunct PPs usually look much like their English counterparts. However, adjuncts sometimes have a repeat of the article before them, as seen in the following examples (in which we bracket it outside of the AP, PP, etc.); we return to this characteristic in section 5.

(12) του πνευματος [του ['αγιου $_{AP}$]]
the Holy Spirit Ac 2:33

(13) της οργης [της [ερχηομενης $_{VP}$]]
the coming wrath 1 Th 1:10

More than one adjunct may occur in a phrase, as illustrated by the following examples:

(14) του ['αγιου $_{AP}$] παιδος [σου $_{DP}$]
your holy servant Ac 4:30

(15) 'ωρα [τριτη $_{AP}$] [της 'ημερας $_{DP}$]
the third hour of the day Ac 2:15

(16) του λαου [μου $_{DP}$] [του [εν Αιγυπτω $_{PP}$]]
my people in Egypt Ac 7:34

(17) την 'ωραν [της προσευχης $_{DP}$] [την [ενατην $_{AP}$]]
the ninth hour of prayer Ac 3:1

(18) 'ημεραν [κυριου $_{DP}$] [την [μεγαλην και επιφανη]$_{AP}$]
the great and glorious day of the Lord Ac 2:20

(19) ανδρες [ευλαβεισ $_{AP}$] [απο παντος εθνουσ των 'υπο τον ουρανον $_{PP}$]
devout men from every nation under heaven Ac 2:4

(20) ['υμων $_{DP}$] την αγαθην [εν Χριστω $_{PP}$] [αναστροφην $_{AP}$]
your good conduct in Christ 1P 3:16

Adjuncts may appear before or after the head noun in Greek.[11] In the preceding examples, most have followed. In the following examples, they precede the head noun.

(21) των [Αιγυπτου $_{DP}$] θησαυρων
the treasures of Egypt Hb 11:26

(22) των [εν Δαμασκω $_{PP}$] μαθητων
the disciples in Damascus Ac 9:19

(iii) εξουσιαν [εκβαλλειν τα δαιμονια]
authority to cast out demons Mk 3:15

[11] Traditional grammars name various positions for adjectives: attributive and predicate, which are sometimes divided into first and second attributive, first and second predicate positions. Despite their long tradition, these labels are misleading in the way they are used in traditional Greek grammar, however. The problem is made worse by the failure to distinguish between the word classes Quantifiers, Demonstratives, and Adjectives, as we show below. Since the descriptive problem is so pervasive (one finds it as far back as Goodwin 1887, but it is undoubtedly much older), it is worth describing in a bit more detail.

Grammars first typically label two positions of the adjective as 'attributive': when it comes between the article and the noun and when it follows a noun and is preceded by an article. Despite the fact that the adjective may be in construction with the noun (i.e., be part of the same noun phrase) and yet be in some other position, it is otherwise said to occur in a 'predicate' position. As a result, quantifiers and demonstratives are taken as adjectives which virtually always occur in a predicate position, although they obviously modify the noun. The terminology, meant to bring clarity to a complicated situation, actually obfuscates it.

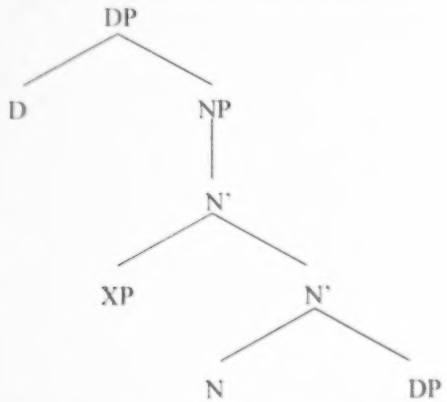
(23) του ['αγιου $_{AP}$] πνευματος
the Holy Spirit Ac 1:8

(24) το ['υπερβαλλον $_{VP}$] μεγεθος
the surpassing greatness Ep 1:19

These facts show that the grammar of Greek does not strictly fix the order of adjuncts with respect to the head noun.[12]

The configuration of the phrase is also a bit flexible. Adjuncts may occur in two positions: they may branch from two intermediate nodes. Consistent with work on phrase structure in other languages, we propose that an intermediate node, called N' (N-bar) occurs between the NP node and the head, as shown in (25).[13] In this schematic diagram, the abbreviation XP represents the range of adjuncts permitted (XP = any phrase, such as NP, VP, DP, or AP).[14]

(25)



This configuration, coupled with an explicit statement of the lack of fixed order between XP and N' (i.e. the *coat hanger* can rotate allowing the XP to occur to the right of N'), generates phrases like those illustrated above (except for the repeated article which sometimes occurs at the beginning of the adjunct). It also predicts that if a complement and adjunct co-occur, the complement will be closer to the head than the adjunct is.[15]

If we consider only heads and adjuncts for the moment, we see that the proposed structure accounts for the word orders Article-Noun-XP and Article-XP-Noun. However, we also need to generate the relatively common order XP-Article-Noun. This order is illustrated by the following examples:

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[12] Traditional Greek grammars make various and contradictory claims about which is the special order and how it affects the meaning. The facts are not clear. Consider, for example, how Lk 8:8 has the contrastive adjective αγαθος in post-nominal position, but Lk 8:15 has the contrastive adjective καλος in pre-nominal position. On the other hand, Lk 4:36 has the non-contrastive adjective ακαθαρτος in pre-nominal position, and Lk 8:29 has the same non-contrastive adjective in post-nominal position. Mackridge 1985 makes the claim that in Modern Greek the post-nominal position give special emphasis (p. 194).

[13] See Palmer 1995 for a similar treatment which is more traditional than ours in that noun phrases are NPs and not DPs. A comparison of this analysis with ours must wait for another time.

[14] The proposed structure also permits the necessary recursion, allowing several adjuncts in the same phrase.

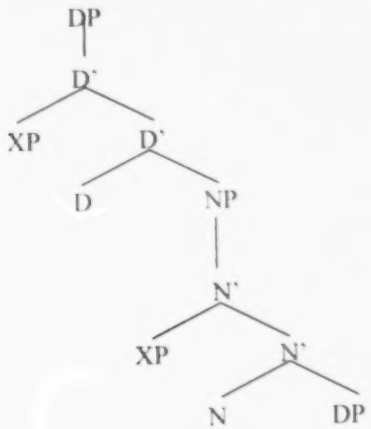
[15] We have found no evidence yet that is counter to this prediction. But see example (82) in which the complement is at the edge of the DP.

(26) [του αρχιερεως]$_{DP}$ τον δουλον
the servant of the high priest Lk 22:50

(27) [του κυριου]$_{DP}$ 'ο λογος
the word of the Lord Ac 19:20

We propose that these adjuncts modify the DP and are adjoined to D' (on either side) with a rule similar to that for adjuncts to N', as shown in the following structure. 2

(28)

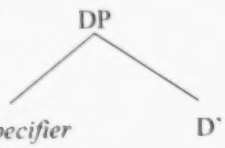


The structure in (28) summarizes what we have proposed so far. The noun may have a complement DP (see the bottom of the diagram). Adjuncts may also modify the NP; these are slightly more removed structurally from the head noun. The head of the DP, namely the Article, takes the NP as its complement. Adjuncts may also modify the DP; these are also structurally more removed from the noun than are the NP adjuncts.

4. Specifiers

The final type of phrase structure function that we need to present is that of *specifier*. The specifier is something like an introducer of the phrase. The specifier is typically the highest element in the phrase and can be either on the right or the left, or both, depending on the language. It occurs directly under the XP, on the same level as the X'. In English, it occurs to the left of the X'; in Greek, it may occur on the right as well as on the left. We present this schematically below.

(29)



We propose that the DP in Greek has two classes of specifiers: Quantifiers and Demonstratives.[16] We also propose that these classes of specifiers are different in their configurational relation to the DP, which fact makes Greek quite different from English. In this respect, the structural analysis we present below departs from that which is typically found in linguistic textbooks.[17] The specifiers in Greek fit into the structure as shown in (30).[18]

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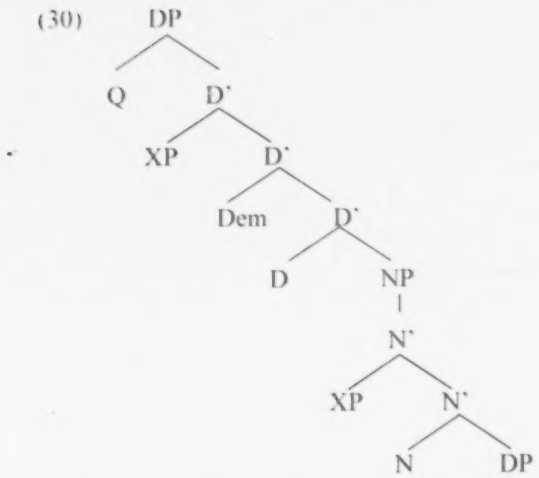
[16] Mackgridge 1985 shows that the facts of Modern Greek are similar.

[17] Abney 1987 proposes for English that possessors (such as *the teacher's*) are the specifier of DP while Articles and Demonstratives are exclusively heads of DP. The same account is not plausible for

(30)



The class of Quantifiers is very small, and includes the words πας *all*, 'απας *all*, 'ολος *all*, and perhaps a couple of other words.[19] Not all quantifying words belong to this class, however: words like πολλας *many* are simply adjectives. The difference between a quantifying adjective and a Quantifier is determined by whether the word has the syntactic properties of one or the other. As we show below, the two are quite different.

Demonstratives co-occur with the article in Greek (unlike in English, since we don't say in English *the this boy* or *this the boy*).[20] There are four demonstratives in Greek. Three are definite (and most often co-occur with the article): 'ουτος *this*, εκεινος *that*, and the emphatic

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Greek, since we have seen that possessors can occur in non-initial and/or non-final positions. Furthermore, Demonstratives and Articles frequently co-occur in Greek, so separate positions are needed.

The NP which is the complement of the Article also has a specifier position available in X' theory. Demonstratives cannot be analyzed as specifiers of the NP, however, because they occur before the Article, not following it as would be predicted (see examples (31)-(35)). Nor are possessor DPs correctly analyzed as specifiers of the NP which is the complement of the Article. If they were, we would predict that the construction Art AP DP N should not be possible, under the assumption that the specifier of the NP should be higher configurationally than the adjunct AP. But the phrase των 'αγιων ... αυτου προφητων *his holy prophets* Ac 3:21, shows that this order is possible.

[18] It is unusual within X' theory to have two specifiers for a single phrase, especially with adjuncts allowed between the specifiers. Such a configuration is necessary to account for all the word orders allowed in Greek DPs, however, as the examples in this section show. Note that in English as well, the Quantifier *all* occurs to the left of the possessor as a second specifier in examples such as *all our students*.

The only alternative to this additional specifier level would be to consider one (or both) of these elements as a head of its own X' phrase, which then takes the DP as its complement. For instance, a Quantifier Phrase could be the top phrase with the Quantifier as its head, an empty specifier position, and DP as its complement. The adjuncts which now come between the two specifier positions could be adjoined to DP and Demonstratives would fill the (unique) specifier of DP. Such a structure would fit X' theory, but it has the drawback of positing a completely null phrase at the top of most nominal phrases where no Quantifier is present. Also, clear evidence of subcategorization is missing. We therefore prefer the additional specifier position within DP.

[19] The word αμπσοτερα *both* in its occurrence in Lk 5:7 fits the criteria of a Quantifier.

[20] Like Quantifiers, Demonstratives are grouped with Adjectives in traditional Greek grammars, despite the different syntactic properties that they display.

demonstrative αυτος.[21] The fourth demonstrative is τις *certain*, which is indefinite (but specific), is often used as an interrogative. It does not co-occur with the article since the article is definite and this demonstrative is indefinite. Examples of this demonstrative include τινος δουλος *a certain slave* Lk 7:2, and τις βασιλευς *which king*? Lk 14:31.

Quantifiers and Demonstratives, like the adjuncts in Greek, may precede or follow the head, although for Demonstratives the most common position is to follow.[22] The head which they precede is the Article (since they are specifiers of the DP); they do not occur in the same positions as Adjective Phrases. This is the first reason for which they must be distinguished from Adjectives.[23] Examples in which they precede include:

(31) 'ολον τον λαον *all the people* Ac 2:47

(32) 'ουτοι 'οι λογοι *these words* Rv 22:6

(33) 'ουτος 'ο λαος *this people* Mt 7:6

(34) ταυτην την παραβολην *this parable* Lk 13:6

(35) αυτος 'ο κυριος *the Lord himself* 1 Th 4:16

Examples in which they follow include:

(36) 'οι μαθηται παντες *all the disciples* Mt 26:56

(37) ταις 'ημεραις ταυταις *these days* Ac 1:15

(38) 'ο λαος 'ουτος *this people* Mt 15:8

(39) τον αγρον εκεινον *that field* Mt 13:44

(40) τα εργα αυτα *the works themselves* Jn 14:11

(41) 'ιερευς τις *a certain priest* Lk 1:5

Both specifiers may co-occur in a single DP. Our structure accounts for the fact that when the Demonstrative and Quantifier co-occur to the right of the head, they occur in the order Demonstrative-Quantifier, and that when they occur to the left of the head, they occur in the order Quantifier-Demonstrative.

(42) 'ολην την γην εκεινην *all that land* Mt 9:26

(43) τησ εκσουσιαν ταυτην 'απασαν *all this authority* Lk 4:6

We have not found any examples of Quantifiers and Demonstratives co-occurring to the left of an Article. Our structure claims that they should occur in the order Quantifier-Demonstrative-Article.[24]

The analysis we propose accounts for the lack of examples such as the following (where asterisk indicates a putatively ungrammatical example).

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[21] There are two homophonous words: the emphatic Demonstrative (discussed here), and the Adjective meaning *same*. They have different syntactic distribution as well as different meanings, as is well known.

[22] Mackridge (1985:193) claims that the most common position for Demonstratives in Modern Greek is before the Article.

[23] Of course, in some ways Adjectives, Demonstratives and Quantifiers are all members of some larger morphological class. They must all agree in number, gender and case with the head noun.

[24] While we do not have access to living native speakers of Koiné Greek, the fact that Modern Greek is so similar syntactically is helpful. Since working out the predictions of our analysis, we discovered the following confirming fact in Mackridge (1985:193) regarding Modern Greek: "the regular position of these modifiers is before the definite article (the quantifiers preceding the demonstratives)."

(44) *Article Quantifier Noun [25]
*'οι παντες μαθηται *(all the disciples)*

(45) *Article Demonstrative Noun
*'ο 'ουτος λαος *(this people)*

(46) *Demonstrative Quantifier Article Noun
*εκεινην 'ολην την γην *(all that land)*

Note that in the structure shown in (30) we propose that adjuncts intervene between the two specifiers. This is to account for examples such as the following in which the adjunct occurs to the outside of the demonstrative.[26]

(47) [καινη $_{AP}$] 'αυτη 'η ['υπο σου λαλουμενη $_{VP}$] διδαχη
this new teaching being spoken by you Ac 17:19

(48) 'η χηρα αυτη ['η [πτωχη] $_{AP}$]
this poor widow Mk 12:43, Lk 21:3

(49) τη 'ημερα εκεινη [τη [μια] $_{AP}$]
that first day Jn 20:19

(50) τον ναον τουτον [τον [χηειροποιητον] $_{AP}$]
this handmade shrine Mk 14:58

(51) το σημειον τουτο [τησ ιασεως $_{DP}$]
this sign of healing Ac 4:22

(52) [πολλασ $_{AP}$] ταυτας 'ημερας
these many days Ac 1:5

Adjuncts are not limited to this position, however. As shown in diagram (30), they may branch off D' (as illustrated above) and they may branch off N'. The latter structure permits them to occur between the Demonstrative and the Noun; this structure is illustrated in (53).

(53) της κακιας [σου $_{DP}$] ταυτης
this wickedness of yours Ac 8:22

(54) της γενεας [της σκολιας $_{AP}$] ταυτης
this wicked generation Ac 2:40

A second way in which the Quantifiers and Demonstratives (as specifiers) are different from Adjectives (as adjuncts) is illustrated in examples (36-41) above. Whereas APs always require the repeated article, Quantifiers and Demonstratives never occur with a repeated article.

For this reason, words like πολυς *much, many* are not members of the class of Quantifiers.

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[25] Goodwin (1887: 204) points out that Quantifiers may in fact sometimes occur between the article and the noun in classical Greek, and Turner (1963: 201) cites the following examples in the New Testament (all with πας): Ac 19:7, Ac 20:18, Ac 27:37, Ga 5:14, and 2 Co 5:10. Both authors claim that the quantifier has a slightly different meaning than when it occurs in its usual position. The same is true in Modern Greek (Mackridge 1985:194), where 'ολος means *all* in one position and *whole* in the other. Regardless, these examples are not readily explained by our account unless the quantifier in question is categorially an Adjective as well as a Quantifier. This dual classification would enable such words to appear in more positions syntactically.

[26] We have not found any example where an adjunct occurs outside of the Quantifier. Our analysis predicts that this should not occur, since the Quantifier fills the top specifier position in the phrase. Adjunction to the DP itself is prohibited theoretically by Chomsky (1986: 6). This requires an alternative position for the extraposition of sentential complements (see section 7).

Note that the word πολυς uses the repeated article in example (55) (unlike Quantifiers), and that it follows the article in example (56) (also unlike Quantifiers).

(55) 'αι 'αμαρτιαι αυτης ['αι πολλαι $_{AP}$]
her many sins Lk 7:47

(56) τα [πολλα $_{AP}$] γραμματα
too much study Ac 26:24

Similarly, the word αυτος in the sense *same* is seen to be an Adjective by its position in the phrase. (Recall that if a Demonstrative precedes the head noun, it also precedes the article.) This is important to know, as introductory texts of Greek correctly explain, because the homophonous emphatic Demonstrative αυτος is distinguished from this Adjective by its distinct syntax.

(57) 'ο αυτος θεος
the same God 1 Co 12:6

5. Repeated article

In some of the examples which we presented above, we have seen something that Greek does which is quite unlike English.[27] When APs and VPs follow the noun in a phrase which has an article, they must also have (with few exceptions) an article identical to the one preceding the head noun.[28] DPs and PPs optionally begin with one of these repeated articles under these conditions. Some of the examples below also appeared earlier:

(58) του λαου [μου $_{DP}$] [του [εν Αιγυπτω] $_{PP}$]
my people in Egypt Ac 7:34

(59) την 'ωραν [της προσευχης $_{DP}$] [την [ενατην] $_{AP}$]
the ninth hour of prayer Ac 3:1

(60) 'ο λογος ['ο [του σταυρου] $_{DP}$]
the word of the cross 1 Co 1:18

(61) το φως [το [εν σοι] $_{PP}$]
the light in you Mt 6:23

We propose (following Myers 1987:95-110) that the adjuncts are all DPs headed by an Article which can take a variety of complements, not just NP, as shown in (62).

---

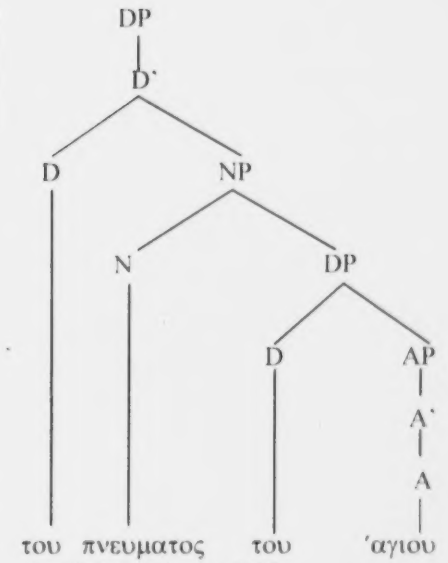
[27] Modern Greek apparently preserves this phenomenon just as it is described here (Mackridge 1985:194). Still other languages that we know of which are somewhat similar to Greek in this regard are the Bantu languages of Africa (Allan 1977, Myers 1987, etc.), which require the noun classifier to be repeated on all adjuncts, and Seri, a Hokan language of northwestern Mexico (Marlett 1981). Other languages have formal devices for expressing the idea of "in construction with". In Farsi, for example, the device is a suffix known as *ezafet* (Rich Rhodes, p.c.).

[28] The following example shows that prenominal adjuncts do not take the repeated article:

(iv) των [περιερχομενων $_{VP}$] [Ιουδαιων $_{AP}$] εξορκιστων
the wandering Jewish exorcists Ac 19:13

Examples in which the post-nominal AP does not have a repeated article include την μαρτυριαν μειζω του Ιωαννου *the witness greater than John* Jn 5:36, and 'ο οχλος πολυς *the great crowd* Jn 12:9. Regarding the latter, Moulton (1908:84) states that "a very curious misplacement of the article occurs."

(62)



the Holy Spirit Ac 2:33

This structure accounts for the word orders seen in the examples, but does not account for the distribution of the repeated Article, i.e. when it must occur and when it may not occur. At present, we do not have any simple way to explain the distribution, so we propose that the generalizations given at the beginning of this section simply be stated as language-specific conditions on adjuncts within the Greek DP. Finally, the fact that the repeated Article must be identical to the Article which heads the DP can be seen as part of the concord agreement within the whole DP.

6. Empty Heads

We have been looking at examples which, for the most part, contain an overt head. We did talk about DPs with no Article present as head and diagrammed them with null heads. As a matter of fact, some NPs also have null or empty heads, as shown below. (We put the null sign in some location permitted by the phrase structure; in some cases more than one position is possible.)[29]

(63) πασι [τοις κατοικουσιν Ιερουσαλημ $_{VP}$] ∅
all the (people) inhabiting Jerusalem Ac 1:19

(64) τα [περι της βασιλειας του θεου $_{PP}$] ∅
the (things) concerning the kingdom of God Ac 1:3

(65) 'οι [εσχατοι $_{AP}$] ∅
the last (ones) Mt 20:16

(66) ['ενα $_{AP}$] τουτων ∅
one of these (people) Ac 1:22

(67) τουτων [των δυο $_{AP}$] ∅
these two (people) Ac 2:24

[29] Alternatively, one might view these as instances of a pronoun like the word *one* (as in *the tall one*). Whereas in English this pronoun has phonetic realization, in Greek it is without phonological substance.

(68) τοις ∅ πασιν
all (people) 1 Co 9:22

(69) τις ∅
who? [which (person)?] Mt 3:7

(70) τι ∅
what (thing)? Mt 11:7

(71) παντες ∅
all, everyone Mk 14:50

(72) ∅ εκεινος
that one Jn 1:8

One type of phrase which does not occur is a DP which ends with an Article, Quantifier, or Demonstrative and an NP with an empty head, as illustrated below (where the asterisk indicates a putatively ungrammatical example):[30, 31]

(73) *[... Article [$\varnothing_{NP}$] $_{DP}$] e.g. *'ο ∅

(74) *[... Q [$\varnothing_{NP}$] $_{DP}$] e.g. *παντες 'ο ∅

(75) *[... Dem [$\varnothing_{NP}$] $_{DP}$] e.g. *εκεινος 'ο ∅

We do not know of any examples where an empty head has a complement, although examples (63)-(72) clearly show that empty heads may have adjuncts.

(76) ? [... [∅ XP_{NP}] $_{DP}$]

It is also the case that DPs which consist of an Article, an NP with an empty head, and a relative clause are ungrammatical if there are no adjuncts present, regardless of whether a specifier is present.[32]

(77) *Art [$\varnothing_{NP}$] [S]

7. Sentential complements

There are DPs in Greek which look quite different from those discussed above. We are thinking about those which have sentences with infinitival verbs and accusative subjects, usually following an article. Consider the objects of the prepositions προ (which governs genitive case),

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[30] Given the fact that there are no living speakers of Koiné Greek with whom we can check various sentences, the statements of ungrammaticality expressed above are hypotheses and not facts. In some cases we feel fairly confident that the corpus is sufficient to establish the basic facts.

[31] Examples of a DP consisting solely of an Article are in fact attested in some situations, although some 'particle' apparently always follows in the examples we have seen, as shown below.

(v) του γαρ και γενος εσμεν
for we also are offspring of that one (Ac 17:28)

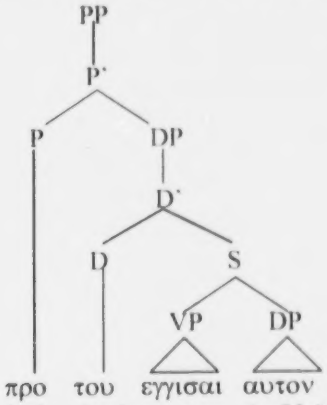
(vi) 'ο δε ειπεν αυτοις
he said to them Jn 4:32

Lindsay Whaley (p.c.) has informed us that bare articles (without an accompanying particle) occur in earlier stages of Greek. If these were common at one time, it may be interesting that they are so rare in Koiné Greek.

[32] Traditional grammars don't treat these facts in this way. Instead, they talk about the 'substantival' use of adjectives, participles, and the like. But this doesn't work at all well for many of the cases at hand, such as when the noun phrase consists of an Article and a PP, or an article and a quantifier. Traditional grammars also do not make explicit the claims presented above about the kinds of DPs which are *not* attested.

εν (which governs dative case), and πριν (not usually considered a preposition since it does not govern any case, as it typically occurs with a sentential complement) in the following examples:

(78)



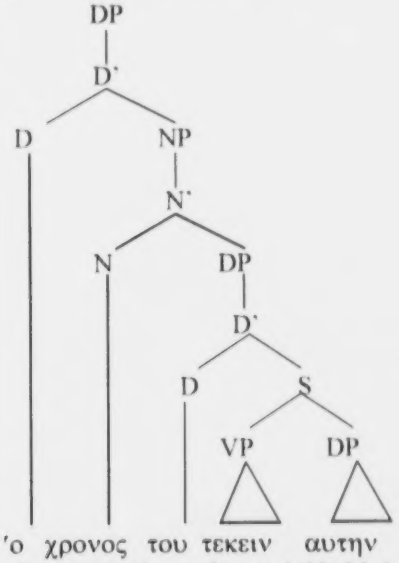
before he draws near Ac 23:15

(79) πριν [αλεκτορα φωνησαι]
before a cock crows Mt 26:34

(80) εν [τη 'ιερατευειν αυτον ...]
while he served as priest ... Lk 1:8

These examples show that the DP may consist of an Article with some kind of sentence (S) as its complement.[33] This sentence will have the usual properties of sentences except that the verb is in the infinitive, and the subject is in the accusative. (The case of the Article, if present, is governed by the Preposition, as expected in Greek grammar, and defaults to genitive case when there is no governor, as shown below.)

(81)



the time for her to bear (child) Lk 1:57

This kind of DP may be used as an adjunct, as in (81), or as a complement to a Noun Phrase, as

[33] We depart here from the most technical kind of notation for these facts.

in (82).

(82) ελπις πασα [του σωζεσθαι 'ημας]
all hope that we might be saved Ac 27:20

We assume that in (82) the sentential complement began in the complement position within the NP and then moved by extraposition to adjoin somewhere on the right. Such movement is common in languages; sentence-level constituents prefer to be peripheral for ease of processing.

8. Conclusion

In this article we have presented a proposal for generating the Greek Noun Phrase. It relies on a fairly straightforward application of X' theory using the widely-used notions of heads, complements, specifiers, and adjuncts. We proposed that Greek Noun Phrases are DPs which have the article as head and take NPs as their complement. Quantifiers and Demonstratives were seen to be specifiers of DP, with Quantifiers as the highest specifier. Adjunct phrases can be DPs which take either the usual NP complement or AP, VP, PP, or S complements. This variety of complements accounts for the repeated article seen in many Greek Noun Phrases. Ordering within the phrase was accounted for by allowing the phrase structure positions to be unordered left-to-right in the configurational diagram and by allowing adjunction to both the N' and D' levels.

While many details remain to be worked out and other constructions, such as relative clauses (see Culy 1989 for one account), need to be analyzed, we feel this proposal is a major step toward understanding the syntax of the Greek Noun Phrase and also lays the foundation for more adequate teaching of this important part of the Greek language.

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